AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

Claim 1 (Currently Amended): An apparatus for receiving a signal, the apparatus comprising:

a channel estimate generator, the channel estimate generator configured to generate a plurality of channel estimates; and

a Doppler frequency estimator comprising a normalizer, wherein the normalizer is configured to normalize at least two channel estimates, and the Doppler frequency estimator is configured to use two or more channel estimates to generate a Doppler frequency.

Claim 2 (Canceled)

Claim 3 (Currently Amended) An apparatus as described in claim 12, the Doppler frequency estimator further comprising a subtractor, the subtractor configured to calculate a difference between said at lest two normalized channel estimates.

Claim 4 (Original) An apparatus as described in claim 3, the Doppler frequency estimator further comprising a multiplier, the multiplier configured to multiply the difference with a constant.

Claim 5 (Currently Amended) An apparatus as described in claim 1, ~~the Doppler frequency estimator comprising a normalizer,~~ the normalizer configured to normalize at least two consecutive channel estimates.

Claim 6 (Original) An apparatus as described in claim 5, the Doppler frequency estimator further comprising a subtractor, the subtractor configured to calculate a difference between said at least two consecutive normalized channel estimates.

Claim 7 (Original) An apparatus as described in claim 6, the Doppler frequency estimator further comprising a multiplier, the multiplier configured to multiply the difference with a constant.

Claim 8 (Original) An apparatus as described in claim 7, wherein Ch(k) and Ch(k-1) are consecutive channel estimates and the Doppler frequency estimate is given by the equation

$$f_D(k) = 360 * \left| \frac{Ch(k-1)}{|Ch(k-1)|} - \frac{Ch(k)}{|Ch(k)|} \right|$$

Claim 9 (Original) An apparatus as described in claim 1, the apparatus further comprising a velocity estimator, the velocity estimator configured to use the Doppler frequency estimate to generate a velocity estimate.

Claim 10 (Original) An apparatus as described in claim 1, the apparatus further comprising a combiner, the combiner configured to average a plurality of Doppler frequency estimates.

Claim 11 (Original) An apparatus as described in claim 10, the apparatus further comprising a velocity estimator, the velocity estimator configured to use the average to generate a velocity estimate.

Claim 12 (Original) An apparatus as described in claim 1, the channel estimate generator configured to receive a first group of pilot symbols.

Claim 13 (Original) An apparatus as described in claim 12, the channel estimate generator configured to receive a second group of pilot symbols, the second group of pilot symbols separated from the first group of pilot symbols by a group of information symbols.

Claim 14 (Original) An apparatus as described in claim 13, the Doppler frequency estimator configured to use a channel estimate from the first group of pilot symbols and a

channel estimate from the second group of pilot symbols to generate the Doppler frequency estimate.

Claim 15 (Original) An apparatus as described in claim 14, the Doppler frequency estimator configured to use an average of channel estimates from the first group of pilot symbols and an average of channel estimates from the second group of pilot symbols to generate the Doppler frequency estimate.

Claim 16 (Currently Amended) An apparatus for receiving a spread spectrum signal, the apparatus comprising:

a plurality of fingers;

a searcher, the searcher configured to find a path for each finger;

a channel estimator, the channel estimator configured to generate a plurality of channel estimates for one of the fingers; and

a Doppler frequency estimator comprising a normalizer, wherein the normalizer is configured to normalize at least two channel estimates, and the Doppler frequency estimator is configured to use two or more channel estimates from said one of the fingers to generate a Doppler frequency estimate.

Claim 17 (Original) An apparatus as described in claim 16, wherein the Doppler frequency estimate is used to adjust at least one of the fingers.

Claim 18 (Original) An apparatus as described in claim 16, wherein the searcher uses the Doppler frequency estimate to determine whether to search for new paths.

Claim 19 (Original) An apparatus as described in claim 16, wherein the Doppler frequency estimate is used to predict the occurrence of new paths.

Claim 20 (Original) An apparatus as described in claim 16, wherein channel estimates from the strongest finger are used to generate the Doppler frequency estimate.

Claim 21 (Original) An apparatus as described in claim 16, wherein channel estimates from a finger other than the strongest finger are used to generate the Doppler frequency estimate.

Claim 22 (Original) An apparatus as described in claim 16, the apparatus further comprising a plurality of channel estimators and a plurality of Doppler frequency estimators, each Doppler frequency estimator configured to use two or more channel estimates from a different channel estimator to generate a Doppler frequency estimate.

Claim 23 (Original) An apparatus as described in claim 22, the apparatus further comprising a combiner, the combiner configured to calculate a weighted combination of Doppler frequency estimates from at least two of the Doppler frequency estimators.